



## **DOCKET NO.** RSW920010072US1

## N THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: M. Trevathan

Examiner: Choi, Woo H.

Serial No.: 09/826,085

Art Unit: 2186

Filed: 4/4/2001

For: IMPROVED METHOD FOR MANAGING A CACHE MEMORY USING A PREDICTIVE MODELING ENGINE TO SELECT A CACHING ALGORITHM

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 RECEIVED

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**Technology Center 2100** 

## **BRIEF OF APPELLANT**

This Appeal Brief, pursuant to the Notice of Appeal filed October 15, 2003, is an appeal from the rejection of the Examiner dated July 17, 2003.

## **REAL PARTY IN INTEREST**

International Business Machines, Inc. is the real party in interest.

## RELATED APPEALS AND INTERFERENCES

None.

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#### STATUS OF CLAIMS

Claims 1 and 3-9 are currently pending. Claims 1 and 3-9 have been rejected. This Brief is in support of an appeal from the rejection of claims 1 and 3-9.

#### STATUS OF AMENDMENTS

An After-Final Amendment filed September 10, 2003 was not entered.

#### **SUMMARY OF INVENTION**

The present invention discloses a method for managing a cache, including analyzing information stored in a caching profile, and responsive to the act of analyzing, selecting a preferred caching algorithm from a plurality of caching algorithms. The analyzing may be performed by a predictive modeling engine. The preferred caching algorithm may be selected from a plurality of caching algorithm See FIG. 3 and specification, page 5, line 17 - page 6, line 16.

The analyzing of information stored in the caching profile may include computing a plurality of metrics, and the preferred caching algorithm may be selected in response to a comparison of the metrics one with another. See specification page 7, lines 7-18. The plurality of metrics may include clustering metrics. The plurality of metrics may include clustering metrics. See specification page 7, line 19 - page 10, line 15.

#### **ISSUES**

- 1. Whether claims 1, 3-7, and 9 are anticipated by Gaither (US Patent No. 6,223,256).
- 2. Whether claim 8 is unpatentable under 35 U.S.C. §103(a) over Arlitt et al. (US Patent No. 6,272,598) in view of admitted prior art.

## **GROUPING OF CLAIMS**

The claims are grouped as shown in Table 1.

Table 1

Group	Issue	Claims	Do Claims of Group Stand or Fall Together?		
1	1	1, 3-7, and 9	No		
2	2	8	(only one claim exists in group 2)		

The claims of Group 2 do not stand and fall together with the claims of Group 1, because the claim of Group 2 is rejected under 35 U.S.C. §103(a), whereas the claims of Group 1 are rejected under 35 U.S.C. §102(e).

In Group 1, claim 3 does not stand and fall together with the claim 1, because claim 3 includes the following issue not present in claim 1: whether Gaither teaches "updating a caching profile in response to arrival of a file".

In Group 1, claim 4 does not stand and fall together with the claims 1 and 3, because claim 4 includes the following issue not present in claims 1 and 3: whether Gaither teaches "wherein the act of analyzing is performed by a predictive modeling engine".

In Group 1, claim 5 does not stand and fall together with the claims 1 and 3-4, because claim 5 includes the following issue not present in claims 1 and 3-4: whether Gaither teaches

"responsive to a comparison of the metrics one with another, selecting a preferred caching algorithm from a plurality of caching algorithms".

In Group 1, claim 6 does not stand and fall together with the claims 1 and 3-5, because claim 6 includes the following issue not present in claims 1 and 3-5: whether Gaither teaches "wherein the plurality of metrics includes clustering metrics".

In Group 1, claim 7 does not stand and fall together with the claims 1 and 3-6, because claim 7 includes the following issue not present in claims 1 and 3-6: whether Gaither teaches "wherein the plurality of metrics includes scattering metrics".

In Group 1, claim 9 does not stand and fall together with the claims 1 and 3-7, because claim 9 includes the following issue not present in claims 1 and 3-7: whether Gaither teaches "wherein the act of analyzing is performed by a predictive modeling engine".

#### **ARGUMENT**

## Issue 1

# CLAIMS 1, 3-7, AND 9 ARE NOT ANTICIPATED BY GAITHER (US PATENT NO. 6,223,256).

The Examiner rejected claims 1, 3-7 and 9 under 35 U.S.C. §102(e) as allegedly being anticipated by Gaither (US Patent No. 6,223,256).

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## Claim 1

Appellant respectfully contends that Gaither does not anticipate claim 1, because

Gaither does not teach each and every feature of claim 1. For example, Gaither does not teach

"wherein the act of analyzing is performed by a predictive modeling engine" (emphasis added).

The Examiner argues Gaither discloses that "the act of analyzing is performed by a predictive

modeling engine (col. 8, lines 45 - 47, collection and analysis of information is done by operating

system or software. Abstract states "Class attributes may indicate a relative likelihood of future

use." These two teachings of Gaither read on the 'predictive modeling engine' limitation.)".

In response to the preceding argument by the Examiner, Appellant notes that col. 8, lines 45-47 of Gaither recites: "The information may be **gathered** by the operating system or by other run-time software" (emphasis added). Therefore, Appellant contends that col. 8, lines 45-47 of Gaither does not teach that the operating system or software performs the act of **analyzing** the information as required by claim 1. In other words, "gathering information" is not "analyzing information". The Examiner's citation from the Abstract merely states a characteristic of a class attribute (i.e., being indicative of a relative likelihood of future use), which is irrelevant to the issue of whether the operating system or software performs the act of **analyzing** as required by claim 1. In summary, Appellant contends that the Examiner's argument that the operating system or software performs the act of **analyzing** the information is not persuasive because all that is disclosed in col. 8, lines 45-47 of Gaither is that the operating system or software gathers information and most certainly does not teach that the operating system or software analyzes information, as required by claim 1.

Based on the preceding arguments, Appellant respectfully maintains that Gaither

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does not anticipate claim 1, and that claim 1 is in condition for allowance. Accordingly,

Appellant contends that the rejection of claim 1 under 35 U.S.C. §102(e) is improper and should
be reversed.

#### Claims 3

Appellant respectfully contends that Gaither does not anticipate claim 3, because Gaither does not teach each and every feature of claim 3.

As a first example of why Gaither does not teach each and every feature of claim 3, Gaither does not teach "updating a caching profile in response to arrival of a file at the cache". The Examiner argues that "Gaither discloses ... updating a caching profile in response to arrival of a file (col. 8 lines 41-53, act of updating a caching profile in response to arrival of a file is disclosed, since the collection and analysis of information is done *dynamically* at run-time)".

In response to the preceding argument by the Examiner, Appellant contends that col. 8 lines 41-53 of Gaither does not teach "updating a caching profile" (emphasis added). The only "updating" that is disclosed in col. 8 lines 41-53 of Gaither is that "the run-time software may dynamically change the cache class of pages (page-table-entries) based on run-time behavior" (emphasis added). However, Appellant contends that col. 8 lines 41-53 of Gaither does not teach that said change of the cache class of pages is accompanied by the updating of a caching profile. Moreover, the Examiner has not even identified a caching profile that is so updated. Appellant poses the question of: where is the alleged caching profile that is updated in accordance with the change of cache class of pages? Col. 8 lines 41-53 of Gaither does not

answer this question, and the Examiner has not made even a single argument that addresses this question. Therefore, Appellant contends that the Examiner's argument is not persuasive in relation to the "updating a caching profile" feature of claim 3.

As a second example of why Gaither does not teach each and every feature of claim 3, Gaither does not teach "updating a caching profile in response to arrival of a file". Appellant notes that Gaither teaches in col. 8, lines 50-53 that "the run-time software may dynamically change the cache class of pages (page-table-entries) based on run-time behavior". The fact that the cache class of pages are being changed dynamically implies that said change of cache class of pages is being changed on the fly as program code is being executed, based on data that is generated and processed as program code is being executed, which does not require the arrival of a file. In fact, Gaither does not teach that the data that so generated and processed (from execution of program code) is stored in a file, and it not inherent that such data would be stored in a file. Changing the cache class of pages dynamically describes a process in which data is (or can be) generated and processed immediately without ever being stored in a file. Therefore, Appellant contends that the Examiner's argument is not persuasive in relation to the "updating a caching profile in response to arrival of a file" feature of claim 3.

As a third example of why Gaither does not teach each and every feature of claim 3, Gaither does not teach "responsive to the act of updating, analyzing information stored in the caching profile" (emphasis added). The Examiner argues: "as noted above, information collection and analyses are done dynamically".

In response to preceding argument by the Examiner, Appellant contends that the preceding argument by the Examiner appears vague and does not appear to be relevant to the preceding feature of claim 3. Appellant notes that the Examiner has previously presented the argument that said "updating" is disclosed in col. 8, lines 50-53 as follows: "the run-time software may dynamically change the cache class of pages (page-table-entries) based on run-time behavior" (emphasis added), which Appellant has refuted supra. However, the Examiner has not presented a citation in Gaither that teaches "analyzing information stored in the caching profile" responsive to said change of the cache class of pages, as required by claim 3. Indeed, Appellant contends that Gaither does not provide such a teaching. In any event, Appellant maintains that the Examiner's argument does not address what happens in response to said change of the cache class of pages and is therefore not persuasive in relation to the "responsive to the act of updating, analyzing information stored in the caching profile" feature of claim 3.

Based on the preceding arguments, Appellant respectfully maintains that Gaither does not anticipate claim 3, and that claim 3 is in condition for allowance. Accordingly, Appellant contends that the rejection of claim 3 under 35 U.S.C. §102(e) is improper and should be reversed.

#### Claim 4

Since claim 4 depends from claim 3, which Appellant has argued *supra* to be patentable and in condition for allowance under 35 U.S.C. §102(e), Appellant maintains that claim 4 is

likewise patentable and in condition for allowance.

In addition with respect to claim 4, Appellant respectfully contends that Gaither does not teach "wherein the act of analyzing is performed by a predictive modeling engine" as explained *supra* in conjunction with claim 1.

Based on the preceding arguments, Appellant respectfully maintains that Gaither does not anticipate claim 4, and that claim 4 is in condition for allowance. Accordingly, Appellant contends that the rejection of claim 4 under 35 U.S.C. §102(e) is improper and should be reversed.

## Claim 5

Appellant respectfully contends that Gaither does not anticipate claim 5, because Gaither does not teach each and every feature of claim 5. For example, Gaither does not teach "responsive to arrival of a file at a cache, analyzing information stored in a caching profile by computing a plurality of metrics (emphasis added)".

The Examiner argues that "Gaither discloses ... responsive to arrival of a file at a cache, analyzing information stored in a caching profile by computing a plurality of metrics (col. 5 lines 7 - 8, classes are ranked in a hierarchy, this requires some basis for comparison, or metrics. See also col. 8, lines 2 - 9, measure of likelihood of future use is also taught)".

Appellant contends that the preceding argument by the Examiner does not address the "responsive to arrival of a file at a cache" feature of claim 5 and is therefore not persuasive. In other words, even if Gaither teaches computing a plurality of metrics (which Gaither doesn't), claim 5 requires teaching a plurality of metrics in response to arrival of a file at a cache, and the

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Examiner has not even addressed the issue of whether the alleged teaching of a plurality of metrics is in response to arrival of a file at a cache. Therefore, Appellant contends that the Examiner's argument is not persuasive.

Moreover, Appellant contends that Gaither does not teach computing a plurality of metrics. The Examiner has identified only one alleged metric in Gaither, namely a measure of likelihood of future use. However, the word "plurality" in claim 5 requires a teaching of computing at least two metrics, which the Examiner has not addressed. In addition, claim 5 requires "computing a plurality of metrics", and the Examiner has not presented any argument that the alleged metric (i.e., measure of likelihood of future use) was obtained through the performance of "computing". Therefore, Appellant contends that the Examiner's argument is not persuasive.

Based on the preceding arguments, Appellant respectfully maintains that Gaither does not anticipate claim 5, and that claim 5 is in condition for allowance. Accordingly, Appellant contends that the rejection of claim 5 under 35 U.S.C. §102(e) is improper and should be reversed.

#### Claim 6

Since claim 6 depends from claim 5, which Appellant has argued *supra* to be patentable and in condition for allowance under 35 U.S.C. §102(e), Appellant maintains that claim 6 is likewise patentable and in condition for allowance.

In addition with respect to claim 6, Appellant respectfully contends that Gaither does not teach "wherein the plurality of metrics includes clustering metrics". The Examiner alleges

"[Gaither teaches] ... the plurality of metrics includes clustering metrics (col. 13, line 4, non-uniform distribution implies clustering)."

In response, Appellant contends that the Examiner's argument does not distinguish between cause and effect as required by claim 6, as will be next explained. Appellant notes that col. 13, line 4 of Gaither is referring to "hierarchical sections with non-uniform distributions", which Gaither explains as follows in col. 12, lines 51-64 in relation to FIG. 4:

"In FIG. 4, the horizontal axis represents locations in a cache numbered from 0-N. The vertical axis represents the probability that a replacement algorithm will place an item of a particular class in a particular location. For items having Class A attributes, the probability of being placed in the locations near location 0 is higher than the probability of being placed in the locations near location N. For items having Class B attributes, the probability of being placed in the locations near location N is higher than the probability of being placed in the locations near location. Therefore, each class has access to the entire cache, but on a statistical basis, victimization of one class by the other class is reduced because the spatial distributions are not uniform."

From the preceding explanation by Gaither, it is clear that the "non-uniform distribution" in Gaither pertains to a situation in which the probability that an item will be placed in a location I in the cache (I=0, 1, 2, ..., N) is a function of I rather than being independent of I. Therefore the metric associated with this "non-uniform distribution" is not a metric that claim 6 reads on, because this "non-uniform distribution" results from a selection of a caching algorithm, as taught by Gaither on col. 12, lines 46-50 ("with multiple replacement algorithms, different classes can be spatially distributed differently within one or more sections, changing the probability of victimization without distinct section boundaries"). However, claim 6 requires (though its dependence on claim 5) that the selection of a caching algorithm results from a comparison of metrics with one another, which is logically impossible if the "non-uniform distribution" is a consequence of a choice of caching algorithm. In other words, claim 6 requires that a

comparison of metrics is a cause of the selected caching algorithm, whereas the non-uniform distribution in Gaither (which the Examiner alleges to be a clustering metric of claim 6) is not a cause of the selected caching algorithm, but is rather a consequence of the selected caching algorithm. In summary, Appellant contends that the Examiner's argument in relation to claim 6 is not persuasive, because the Examiner's failure to consider the cause and effect relationships discussed *supra* has resulted in the Examiner incorrectly concluding that Gaither's non-uniform distribution is a metric recited in claim 6.

Based on the preceding arguments, Appellant respectfully maintains that Gaither does not anticipate claim 6, and that claim 6 is in condition for allowance. Accordingly, Appellant contends that the rejection of claim 6 under 35 U.S.C. §102(e) is improper and should be reversed.

## Claim 7

Since claim 7 depends from claim 5, which Appellant has argued *supra* to be patentable and in condition for allowance under 35 U.S.C. §102(e), Appellant maintains that claim 6 is likewise patentable and in condition for allowance.

In addition with respect to claim 7, Appellant respectfully contends that Gaither does not teach "wherein the plurality of metrics includes scattering metrics". The Examiner alleges:

"[Gaither teaches] ... the plurality of metrics includes scattering metrics (col. 13, line 3, in a uniform distribution things are scattered evenly)."

In response, Appellant contends that the examiner's argument does not distinguish between cause and effect as required by claim 7, as will be next explained. Appellant notes that

col. 13, line 3 of Gaither is referring to "hierarchical sections with uniform distributions", which are the opposite of "non-uniform distributions". Gaither explains non-uniform distributions as follows in col. 12, lines 51-64 in relation to FIG. 4:

"In FIG. 4, the horizontal axis represents locations in a cache numbered from 0-N. The vertical axis represents the probability that a replacement algorithm will place an item of a particular class in a particular location. For items having Class A attributes, the probability of being placed in the locations near location 0 is higher than the probability of being placed in the locations near location N. For items having Class B attributes, the probability of being placed in the locations near location N is higher than the probability of being placed in the locations near location. Therefore, each class has access to the entire cache, but on a statistical basis, victimization of one class by the other class is reduced because the spatial distributions are not uniform."

From the preceding explanation by Gaither, it is clear that the "uniform distribution, which is the opposite of the "non-uniform distribution", pertains to a situation in which the probability that an item will be placed in a location I in the cache (I=0, 1, 2, ..., N) is independent of I. Therefore the metric associated with this "uniform distribution" is not a metric that claim 7 reads on, because this "uniform distribution" results from a selection of a caching algorithm, as taught by Gaither on col. 12, lines 46-50 ("with multiple replacement algorithms, different classes can be spatially distributed differently within one or more sections, changing the probability of victimization without distinct section boundaries"). However, claim 7 requires (though its dependence on claim 5) that the selection of a caching algorithm results from a comparison of metrics with one another, which is logically impossible if the "uniform distribution" is a consequence of a choice of caching algorithm. In other words, claim 7 requires that a comparison of metrics is a cause of the selected caching algorithm, whereas the uniform distribution in Gaither (which the Examiner alleges to be a scattering metric of claim 7) is not a cause of the selected caching algorithm, but is rather a consequence of the selected caching algorithm. In summary, Appellant contends that the

Examiner's argument in relation to claim 7 is not persuasive, because the Examiner's failure to consider the cause and effect relationships discussed *supra* has resulted in the Examiner incorrectly concluding that Gaither's uniform distribution is a metric of claim 7.

Based on the preceding arguments, Appellant respectfully maintains that Gaither does not anticipate claim 7, and that claim 7 is in condition for allowance. Accordingly, Appellant contends that the rejection of claim 7 under 35 U.S.C. §102(e) is improper and should be reversed.

## Claim 9

Since claim 9 depends from claim 5, which Appellant has argued *supra* to be patentable and in condition for allowance under 35 U.S.C. §102(e), Appellant maintains that claim 9 is likewise patentable and in condition for allowance.

In addition with respect to claim 9, Appellant respectfully contends that Gaither does not teach "wherein the act of analyzing is performed by a predictive modeling engine" as explained *supra* in conjunction with claim 1.

Based on the preceding arguments, Appellant respectfully maintains that Gaither does not anticipate claim 9, and that claim 9 is in condition for allowance. Accordingly, Appellant contends that the rejection of claim 9 under 35 U.S.C. §102(e) is improper and should be reversed.

## Issue 2

## <u>CLAIM 8 IS NOT UNPATENTABLE UNDER 35 U.S.C. §103(a) OVER ARLITT ET AL.</u> (US PATENT NO. 6,272,598) IN VIEW OF ADMITTED PRIOR ART.

The Examiner rejected claim 8 under 35 U.S.C. §103(a) as allegedly being unpatentable over Arlitt et al. (US Patent No. 6,272,598) in view of admitted prior art.

Appellant respectfully contends that since claim 8 depends from claim 5, which Appellant has argued *supra* to be patentable under 35 U.S.C. §102(e), Appellant maintains that claim is not unpatentable under 35 U.S.C. §103(a).

In addition, Appellant respectfully contends that claim 8 is not unpatentable over Arlitt in view of the admitted prior art because Arlitt in view of the admitted prior art does not teach or suggest other features of claim 8.

As a first example illustrating that Arlitt in view of the admitted prior art does not teach or suggest other features of claim 8, Appellant contends that Arlitt in view of the admitted prior art does not teach or suggest the feature: "responsive to arrival of a file at a cache, analyzing information stored in a caching profile by computing a plurality of metrics". The Examiner argues that "Artlitt discloses ... responsive to arrival of a file at a cache, analyzing information stored in a caching profile by computing a plurality of metrics (col. 5, lines 48- 50)".

In response to the preceding argument by the Examiner, Appellant notes that col. 5, lines 48-50 of Artlitt recites: "The hit rate and byte hit rate are the two main (or most common) performance metrics used to measure performance of proxy cache such as the cache 72."

Appellant contends that col. 5, lines 48-50 of Artlitt is totally silent as to the "responsive to

arrival of a file at a cache" aspect of the preceding feature of claim 8. Indeed, the Examiner has not even considered the issue of whether the alleged "analyzing information stored in a caching profile by computing a plurality of metrics" in Artlitt is "responsive to arrival of a file at a cache" as required by claim 8. Appellant further contends that col. 5, lines 48-50 of Artlitt is totally silent as to "information stored in a caching profile". Artlitt does not disclose a caching profile and the Examiner has not even considered the issue of whether a caching profile is disclosed in Artlitt. Accordingly, Appellant contends that the Examiner has not established a *prima facie* case of obviousness in relation to claim 8.

As a second example illustrating that Arlitt in view of the admitted prior art does not teach or suggest other features of claim 8, Appellant contends that Arlitt in view of the admitted prior art does not teach or suggest the feature: "responsive to a comparison of the metrics one with another, selecting a preferred caching algorithm from a plurality of caching algorithms".

The Examiner argues that "Artlitt discloses ... responsive to a comparison of the metrics one with another, selecting preferred caching algorithm from a plurality of caching algorithms (col. lines 35 - 47)".

In response to the preceding argument by the Examiner, Appellant notes that the Examiner has not identified the relevant column number of Artlitt. Appellant is guessing that the Examiner is referring to col. 5, lines 35-47 of Artlitt. Appellant contends that col. 5, lines 35-47 of Artlitt discloses selection of a caching algorithm that is keyed to the characteristics of objects in the cache, but Artlitt does not disclose in col. 5, lines 35-47 of Artlitt that said selection of a caching algorithm is "responsive to a comparison of the metrics one with another" as required by

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claim 8. Accordingly, Appellant contends that the Examiner has not established a *prima facie* case of obviousness in relation to claim 8.

As a third example illustrating that Arlitt in view of the admitted prior art does not teach or suggest other features of claim 8, Appellant contends that Arlitt in view of the admitted prior art does not teach or suggest the feature: "wherein the plurality of caching algorithms includes a least-used caching algorithm, a most-used caching algorithm, a least-recently-used caching algorithm, and a most-recently-used caching algorithm". The Examiner argues that "wherein the plurality of caching algorithms includes a least-used caching algorithm (col. 6, lines 4 - 5) and a least-recently-used caching algorithm (col. 5, lines 62 - 63). ... However, Arlitt does not specifically disclose the use of a most-recently-used caching algorithm and a most-used caching algorithm. On the other hand, Applicant admitted that these two algorithms were known on pages 2 and 3 of the specification."

In response to the preceding argument by the Examiner, Appellant acknowledges that the specification of the present patent application states that a most-recently-used caching algorithm and a most-used caching algorithm are known in the art. However, the admitted prior art does disclose selecting (in comparison of the metrics one with another) a preferred caching algorithm from a plurality of caching algorithms that include a most-recently-used caching algorithm and a most-used caching algorithm, as required by claim 8. Therefore, the issue of whether the admitted prior art can be combined with Artlitt is not relevant, since the admitted prior art does not teach or suggest the aforementioned feature of claim 8.

Based on the preceding arguments, Appellant respectfully maintains claim 8 is not

unpatentable over Arlitt in view of the admitted prior art, and that claim 8 is in condition for allowance.

## **SUMMARY**

In summary, Appellant respectfully requests reversal of the July 17, 2003 office action rejection of claims 1 and 3-9.

Respectfully submitted,

Jack P. Friedman

Attorney For Appellant Registration No. 44,688

Dated: 11/1/2003

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## **DOCKET NO.** RSW920010072US1

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: M. Trevathan Examiner: Choi, Woo H.

Serial No.: 09/826,085 Art Unit: 2186

Filed: 4/4/2001

For: IMPROVED METHOD FOR MANAGING A CACHE MEMORY USING A PREDICTIVE MODELING ENGINE TO SELECT A CACHING ALGORITHM

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

#### **APPENDIX - CLAIMS ON APPEAL**

1. A method for managing a cache, comprising the acts of:

analyzing information stored in a caching profile; and

responsive to the act of analyzing, selecting a preferred caching algorithm from a plurality of caching algorithms;

wherein the act of analyzing is performed by a predictive modeling engine.

3. A method for managing a cache, comprising the acts of:

updating a caching profile in response to arrival of a file;

responsive to the act of updating, analyzing information stored in the caching profile; and

responsive to the act of analyzing, selecting a preferred caching algorithm from a plurality

of caching algorithms.

- 4. The method of claim 3, wherein the act of analyzing is performed by a predictive modeling engine.
  - 5. A method for managing a cache, comprising the acts of:

responsive to arrival of a file at a cache, analyzing information stored in a caching profile by computing a plurality of metrics; and

responsive to a comparison of the metrics one with another, selecting a preferred caching algorithm from a plurality of caching algorithms.

- 6. The method of claim 5, wherein the plurality of metrics includes clustering metrics.
- 7. The method of claim 5, wherein the plurality of metrics includes scattering metrics.
- 8. The method of claim 5, wherein the plurality of caching algorithms includes a least-used caching algorithm, a most-used caching algorithm, a least-recently-used caching algorithm, and a most-recently-used caching algorithm.
- 9. The method of claim 5, wherein the act of analyzing is performed by a predictive modeling engine.

TRANS		Docket No. RSW920010072US1						
In Re Application Of: M. Trevathan								
Serial No.	Filing Date	4 2000 55	Examiner		Group Art Unit			
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Invention: IMPROVED METHOD FOR MANAGING A CHACHE MEMORY USING A PREDICTIVE MODELING ENGINE TO SELECT A CACHING ALGORITHM  RECEIVED								
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